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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,038	12/11/2003	Theodore W. Houston	TI-35881	8454
23494	7590	04/14/2006	EXAMINER	
TEXAS INSTRUMENTS INCORPORATED P O BOX 655474, M/S 3999 DALLAS, TX 75265			LE, THONG QUOC	
			ART UNIT	PAPER NUMBER
			2827	

DATE MAILED: 04/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/733,038	Applicant(s) HOUSTON, THEODORE W. (mw)	
	Examiner Thong Q. Le	Art Unit 2827	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 9, 10, 12-16, 20 and 21 is/are rejected.
- 7) ☒ Claim(s) 6-8 and 17-19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Amendment filed on 01/17/2006 has been entered.
2. Claims 1-10, 12-21 are presented for examination.

Response to Arguments

3. Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-5,9-10,12-16,20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Wendell (U.S. Patent No. 5,936,892).

Regarding claims 1, 12, Wendell discloses an SRAM device (Figure 1) comprising:

an SRAM array (Figure 1, 10) coupled to row peripheral circuitry (Figure 1, 16) by word line (Figure 1, WL) and coupled to column peripheral circuitry (Column 22, lines 55-58, column decoder) by bit lines (Figure 1, BLT, BLC); and

an array low voltage control circuitry (Figure 1, 28) that provides an enhanced low operating voltage V_{ess} to SRAM array during at least a portion of an active mode

thereof, (Column 4, lines 54-65) the enhanced low operating voltage V_{ss} having a higher value than a low operating voltage V_{ss} (Column 5, lines 10-27).

Regarding claims 2, 13, Wendell discloses wherein the array low voltage control circuitry provides the enhanced low operating voltage V_{ss} only during a write operation (Column 4, lines 55-56).

Regarding claims 3, 14, Wendell discloses wherein the array low voltage control circuitry provides the enhanced low operating voltage V_{ss} only during all of active mode (Column 4, lines 55-56, read and write mode).

Regarding claims 4, 15, Wendell discloses wherein the array low voltage control circuitry provides the enhanced low operating voltage V_{ss} only during all modes (Column 5, lines 3-6).

Regarding claims 5, 10, 16, 21, Wendell discloses wherein the array low voltage control circuitry provides the enhanced low operating voltage V_{ss} based on a factor selected from the group consisting of a transistor parameter (Figure 1, 36,34).

Regarding claims 9,20 Wendell discloses wherein the array low voltage control circuitry employs an active component to provide the enhance low operating voltage V_{ss} (Column 4, lines 65-67, Column 5, lines 1-3).

Allowable Subject Matter

6. Claims 6-8, 17-19 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 6-8 include allowable subject matter since the prior art made of record and considered pertinent to the applicant's disclosure does not teach or suggest the claimed limitations. Wendell (U.S. Patent No. 5,936,892), and others, does not teach the claimed invention having wherein the array low voltage control circuitry provides the enhanced low operating voltage V_{ss} at higher value when based on a strong n process corner as claims 6, 17 disclosed, and V_{ss} lower value during a read operation than during a write operation as claims 7, 18 disclosed, and the array low voltage control circuitry only provides the lower value for an addressed column of the SRAM as claims 8, 19 disclosed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Q. Le whose telephone number is 571-272-1783. The examiner can normally be reached on 8:00am-5:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarabian Amir can be reached on 571-272-1852. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thong Q. Le
Primary Examiner
Art Unit 2827

4/7/2006